Evolving FPCP

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Why?

• We must converge Model-I and II into a consistent spec to bring to the WG
  • Those two are currently disconnected but just coexist in the same doc.

• FPCP must provide abstractions which is clearly distinguished from concretes
  • Current Model-I includes varied level of abstractions
  • Some of them are very similar with Model-II concretes
  • It makes much confusion of why that two are needed?
Modeling Concept

Current

Model-1
Port
Property
Property

Model-2
Context
Attribute
 Attribute

New

Policy-group
Policy
Rule
Descriptor(s)
Action(s)

Rule
Descriptor(s)
Action(s)

Port
Context
Primitive

Topology
DPN-set
Access DPN

DPN-set
Anchor DPN
New Operational Concept

Model-1 Operation

Client
- Configure \{DPN-set: \{DPN(s) addr, role, tunnel-type, mtu\}\}
- Configure \{Policy: rule(s), descriptor(s), action(s)\}
- Configure \{Policy-group: Policy(ies)\}
- Create \{Port: DPN-set, Policy-group(s)\}
- Create \{Context: Port(s)\} // e.g., MN attached
- Update \{Port: DPN-set\} // e.g., hand-over
- Query \{Port: DPN(s), Contexts status, etc.,\}
- Reply \{Port: DPN(s), Contexts status, etc.,\}
- Delete \{Context: Context(s)\} // e.g., Teardown bearer(s)
- Delete \{Context: Port(s)\} // e.g., MN detached

Agent

Model-2 Operation

Client
- Create \{Tunnel-IF: tunnel-param, Context\}
- Create \{IP-route: dest, nhop, Context\}
- Create \{Policy-route: Context\}
- Create \{QoS-resource, Context\}
- Update \{Tunnel-param, Context\}
- Delete \{Tunnel-IF, Context\}
- Create \{IP-route, Context\}
- Create \{Policy-route, Context\}
- Create \{QoS-resource, Context\}
Model-2 Operations can reinforce Model-1 Operations

Model-1 Operation:
- Create {Port: DPN-set, Policy-group(s)}
- Create {Context: Port(s)} // e.g., MN attached

Model-2 Operation:
- Update {Tunnel-param (TEID, etc.), Context}
  - e.g., Tunnel-ID setting
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